



# National Science Foundation

## *Rotational Vacancy*

**ANNOUNCEMENT NO:** E20060099-Rotator

**OPEN:** 05/10/2006

**CLOSE:** 07/05/2006

**POSITION WILL BE FILLED ON A ONE OR TWO YEAR VISITING SCIENTIST APPOINTMENT, INTERGOVERNMENTAL PERSONNEL ACT (IPA) ASSIGNMENT BASIS, OR FEDERAL TEMPORARY APPOINTMENT.**

The National Science Foundation is seeking a qualified candidate for the position of Program Director for the Fundamental Algorithms area of Theoretical Foundations (TF) Cluster in the Division of Computing and Communication Foundations (CCF), Directorate for Computer and Information Science and Engineering (CISE), Arlington, VA.

CCF supports research and education activities that explore the foundations of computing and communication devices and their usage. The Division seeks advances in computing and communication theory, algorithms for computer and computational sciences, and architecture and design of computers and software. CCF-supported projects also investigate revolutionary computing paradigms based on emerging scientific ideas and integrate research and education activities to prepare future generations of computer science and engineering workers. More information about CCF and their clusters can be found on their website at <http://www.cise.nsf.gov/div/index.cfm?div=ccf>.

**The Theoretical Foundations Cluster (TF)** covers a broad range of topics that form the scientific foundations for computing and communication. At this time we seek expertise in numerical computing, optimization, and algorithms for computational science and engineering. A successful program director will encourage connections between these areas and other topics within the cluster, division, and community of researchers and educators. Topics of interest to the TF cluster include models for representing mathematical and scientific information, models of computation, parallel and distributed computation, algorithmic and computational approaches to mathematics, advanced scientific computing and large-scale, high-end application methodologies, advanced techniques for communicating information on a variety of channels, advanced signal processing techniques for multiple media, centralized and ad hoc wireless networks, and distributed sensor systems and networks.

This position will be filled on a one or two year Visiting Scientist Appointment, under the terms of the Intergovernmental Personnel Act (IPA) or as a Federal Temporary Appointment. Temporary and Visiting Scientist appointments will be made under the Excepted Authority of the NSF Act with a current salary range of \$91,407 to \$142,449. For Federal temporary appointments of more than one year, the usual civil service benefits (retirement, health and life insurance) are applicable. For Visiting Scientist appointments, individuals are in a non-pay leave status from his/her home institution and are appointed to NSF's payroll as a Federal employee. NSF withholds Social Security and provides reimbursement to the home institution for fringe benefits. For IPA assignments, the individual remains on the payroll of his/her home institution and the institution continues to administer pay and benefits. NSF reimburses the institution for NSF's negotiated share of the costs. Individuals eligible for an IPA assignment include employees of State and local government agencies, institutions of higher education, Indian tribal governments, federally funded research and development centers and qualified nonprofit organizations. The individual remains an employee of the home institution. For more information regarding Visiting Scientist appointments or IPA assignments, visit our website at [http://www.nsf.gov/about/career\\_ops](http://www.nsf.gov/about/career_ops).

**DUTIES AND RESPONSIBILITIES:** As Program Director directs in the implementation, review, funding, post-award management, and evaluation of the program and contributes to the intellectual integration with other

programs supported by the Division. Designs and implements the proposals review and evaluation process for relevant proposals. Selects well qualified individuals to provide objective reviews on proposals either as individuals or as members of a panel. Also conducts final review of proposals and evaluations, and recommends acceptance or declination. Manages and monitors on-going grants, contracts, interagency and cooperative agreements to ensure fulfillment of commitments to NSF. Evaluates progress of awards through review and evaluation of reports and publications submitted by awardees and/or meetings at NSF and during site visits. Contributes to the responsibility for establishing goals and objectives, initiating new program thrusts and phasing out old projects. Recommends new or revised policies and plans in scientific, fiscal, and administrative matters to improve the activities and management of the Program.

**QUALIFICATIONS REQUIRED:** Applicants must have a Ph.D. or equivalent experience in computer science, computer engineering, computational science, communication, information science, or allied disciplines, and significant experience in education. In addition, six or more years of successful research, research administration, and/or managerial experience pertinent to the program is required. Candidates must demonstrate experience and an educational background in CISE areas (computer science and engineering, computational science, communication, and information science). The particular areas of expertise corresponds to the topic Theory of Computing, which includes models of computation, computational complexity, cryptography, fundamental algorithms, (including combinatorial, approximate, parallel, random, and online algorithms that transcend application domains), and algorithmic approaches to algebra, logic, geometry, topology, graph theory, and other branches of mathematics

**HOW TO APPLY:** Applications maybe transmitted electronically to [rotator@nsf.gov](mailto:rotator@nsf.gov). Individuals may also submit a resume or any application of your choice to the National Science Foundation, Division of Human Resource Management, 4201 Wilson Blvd., Arlington, VA 22230, Attn: E20060099-Rotator. In addition, you are encouraged to submit a narrative statement that addresses your background and/or experience as it relates to this position. You are asked to complete and submit the attached Applicant Survey form. Submission of this form is voluntary and will not affect your application for employment (the information is used for statistical purposes). Telephone inquiries may be referred to the Executive and Visiting Personnel Branch, at 703-292-8755. For technical information, contact Dr. Michael Foster, Division of Computing, and Communication Foundations, at (703) 292-8910. Hearing impaired individuals may call TDD (703) 292-8044.

The National Science Foundation provides reasonable accommodations to applicants with disabilities on a case-by-case basis. If you need a reasonable accommodation for any part of the application and hiring process, please notify the point of contact listed on this vacancy announcement.

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HIGHLY QUALIFIED STAFF THAT REFLECTS THE DIVERSITY OF OUR NATION**

NATIONAL SCIENCE FOUNDATION  
APPLICANT SURVEY

OMB No. 3145-0096  
Expiration: 7/31/2005

Vacancy Ann. #: \_\_\_\_\_ Position Status (temporary/permanent): \_\_\_\_\_

Position Title/Series/Grade: \_\_\_\_\_

**INSTRUCTIONS**

Your completion of this form will be appreciated. Submission of this Information is voluntary and it will have no effect on the processing of your application. The data collected will be used only for statistical purposes to ensure that agency personnel practices meet the requirements of Federal law. Pursuant to 5 CFR 1320.5(b), an agency may not conduct or sponsor, and a person is not required to respond to an information collection unless it displays a valid OMB control number. The OMB control number for this collection is 3145-0096. NSF estimates that each respondent should take about 3 minutes to complete this survey, including time to read the instructions. You may have comments regarding this burden estimate or any other aspect of this survey, including suggestions for reducing this burden. If so, please send them to NSF Reports Clearance Officer, Division of Administrative Services, NSF, 4201 Wilson Blvd., Arlington, VA. 22230.

**PRIVACY ACT INFORMATION**

GENERAL - This information is provided pursuant to Public Law 93-579 (Privacy Act of 1974), December 31, 1974, for individuals completing Federal records and forms that solicit personal information.

AUTHORITY - Section 7201 of title 5 of the U.S. Code and Section 2000e-16 of title 42 of the U.S. Code.

**PURPOSE AND ROUTINE USES**

The information is used for research and for a Federal Equal Opportunity Recruitment Program (FEORP) to help insure that agency personnel practices meet the requirements of Federal law. Address questions concerning this form and its uses to the Privacy Act Officer, National Science Foundation, Arlington, VA 22230.

1. Today's Date: \_\_\_\_\_ 2. Year of Birth: \_\_\_\_\_

3. How did you learn about the particular position for which you are applying? (Circle appropriate number.)

- |   |   |
|---|---|
| 01 - Newspaper (specify) _____  | 10 - Federal, State or local job information center                       |
| 02 - Contact with NSF Personnel Office<br>(Agency Bulletin Board or other Announcement) | 11 - State vocational rehabilitation agency or<br>Veterans Administration |
| 03 - NSF-initiated personal contact   | 12 - State employment office  |
| 04 - Science Magazine, or other professional journal or magazine<br>(specify) _____     | 13 - School or college counselor or other official                        |
| 05 - Affirmative Action Register  | 14 - Private job Information service                                      |
| 06 - Attendance at conference, meeting or job fair<br>(specify) _____                   | 15 - Private employment service   |
| 07 - NSF recruitment at school or college   | 16 - Friend or relative working at NSF                                    |
| 08 - Colleague referral   | 17 - Friend or relative not working at NSF                                |
| 09 - NSF Bulletin   | 18 - NSF website  |
|   | 19 - Internet or other website  |
|   | 20 - Other (specify) _____  |

4. Select the ethnic category with which you most closely identify:

- A. **Hispanic or Latino.** A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.
- B. **Not Hispanic or Latino.**

5. Select one or more racial category with which you most closely identify:

- A. **American Indian or Alaska Native.** A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.
- B. **Asian.** A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
- C. **Black or African American.** A person having origins in any of the black racial groups of Africa.
- D. **Native Hawaiian or Other Pacific Islander.** A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
- E. **White.** A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

6. Sex (Circle the appropriate letter.) F - Female M - Male

7. Please provide information on your disability status by circling the appropriate category below:

- 1. I do not have a disability; 2. Hearing impairment; 3. Vision impairment; 4. Missing extremities; 5. Partial paralysis;
- 6. Complete paralysis; 7. Convulsive disorder; 8. Mental retardation; 9. Mental or emotional illness; 10. Severe distortion of limbs and/or spine; 11. I have a disability but it is not listed.

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**FOR AGENCY USE**

Agency Code: \_\_\_\_\_

**AN EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER**